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RECORD SAND SHARK FOR NORTHERN WATERS.

An unusually large specimen of the Sand Shark (*Carcharias taurus*) was captured on August 25, 1921, by Captain Charles Hurd of Clinton, Connecticut. Captain Hurd had set his gill-net at the mouth of Clinton Harbor, especially for menhaden for lobster bait. The shark became entangled in the gill-net and was drawn up to the gunwale of the boat. He was still alive and put up a vigorous fight but was finally despatched by two or three blows from a large hickory club which Captain Hurd carries in his boat for just such purposes. The shark was then towed ashore and hauled out on the beach. Its estimated weight was 250 pounds and it measured 8 ft. 10 in. over all. The jaws were removed, partially cleaned and taken to the American Museum of Natural History. The specimen was a female, but was without young.

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SELAR, A GENUS OF CARANGOID FISHES.

The generic name *Selar* was first defined by Bleeker in Nat. Tijdschr. Nederl-Ind.-I.-1851 (1852) page 352, in a paper entitled: ***Over Eenige nieuwe Geslachten en Soorten van makreelachtige Visschen van den Indischen Archipel.***

Selar is here defined in the following terms:— "Dentes supramaxillares et inframaxillares, uniseriati, aegnales. Dentes vomeriis palatini linguales."

Bleeker further indicates a difference from *Decapterus* in the absence of finlets, and from *Caranx* proper in the longer body and straight profile. To this genus were referred *"Caranx plumieri* CV., *Caranx analis* CV., *Caranx djeddaba* Rup., etc." As Bleeker in this paper refers to work done at the "end of 1851 and the beginning of 1852," the actual date of the paper must be 1852, although in his own "Levensbericht" (1877), Bleeker places it at the head of his list of 1851.

In other papers of Bleeker of 1851 and 1852, published in the same journal (but all so far as I can ascertain of later date), I find the name *Selar* used in connection with other related species, all with elongate body, the jaws with equal teeth in a single row, and teeth also on vomer, palatines and tongue.

A few pages earlier (page 343) in the very same memoir, occurs a list of species of *Selar,* beginning with*"Trachurus trachurus* CV." and including *torvus* Jenyns, *boops* CV., *macrurus, hasselti, kuhli, brevis* and *malam* Bleeker, *para* CV., *djeddaba* Rüppell, *novae-guineae* and *microchir* CV.

If we recognize page priority, and at the same time respect Bleeker's later adopted rule of regarding the first species mentioned as type, *trachurus* must be chosen as such, and *Selar* become a synonym of *Trachurus* Rafinesque.

If we recognize page priority, and take the species in the above list first chosen as type by a later reviser we have the following: Jordan & Evermann, 1896, *Caranx boops* CV.; Jordan, 1919, (Genera of Fishes) *Selar hasselti,* Bleeker; Fowler, 1920, *Caranx boops* CV.

If we disregard page priority, we may take as type the first species actually named in connection with the generic description, *Caranx plumieri* CV. Or, following the "first reviser" rule, we must take *Caranx*

boops. As both *plumieri* (= crumenophthalmus) and *boops* belong to the Genus *Trachurops* Gill, the name *Selar*, as Fowler has indicated, would replace *Trachurops*.

In any event, *hasselti* can not be taken as type of *Selar* and the group to which it belongs must, if recognized, find a new name.

I have referred the matter of *Selar* to our commission and quote a letter from the secreteary which I accept as conclusive. In this view *Selar* replaces *Trachurops* Gill.

"1. Referring again to your letter of July 22nd, in regard to *Selar*, I have looked up the original reference by Bleeker, 1851. If it can not be shown that Bleeker was using the 'first species rule' at this time, and that later he did not designate type, it seems to me obvious that as you and Evermann first designated the type in 1896a, p. 916, that your type-designation *boops* stands unchallenged.

"2. Were I ruling on the 'first species rule' I would take *Selar trachurus* as the type; but it is not clear to me that the 'first species rule' applies in this case. [Signed] C. W. Stiles."

DAVID STARR JORDAN,
Stanford University, Calif.

PURPLE SALAMANDER

The Purple Salamander, *Gyrinophilus porphyriticus* (Green), is one of the rarest salamanders of Pennsylvania. Any information as to its feeding habits should be of interest even though based on but a single observation as in the present instance.

On March 21 of this year, an adult purple salamander, measuring 6¼ inches in total length, was captured under a log lying near the edge of a brook in Castle Shannon, Alleghany County, Pennsylvania. It is difficult to say if this habitat is typical of the species. We have examined specimens captured in a spring and one taken from a rather deep lake.

The specimen was placed alive in a small tin box which contained several live specimens of the dusky salamander, *Desmognathus fuscus* (Rafinesque). A short time later all but two of the dusky salamanders were removed. On March 23 one of these two was seen in the box but on March 24 both had disappeared. Later the same day the purple salamander, while being handled, disgorged the two dusky salamanders. They had been eaten apparently head first since the head and anterior portions of the body were the most digested. It would be interesting to know if salamanders form the chief food of the purple salamander and if this form has a definite method of swallowing its prey.

P. H. Pope, *Pittsburg, Pa.*
G. K. Noble, *New York, N. Y.*

THE MAP TURTLE, *GRAPTEMYS GEOGRAPHICA* (LE SUER) IN NEW YORK

The Map Turtle which is usually reported in accounts of New York reptiles as occurring only in the western part of the State is particularly abundant in the warm shallow bays of the south shore of Lake Ontario. In Great Sodus Bay a few hours' collecting in September, 1920, resulted in the capture of 14 individuals, varying in length of carapace from 2½ to 9 inches. Seven were seen at one time on the partly submerged hull of an old sail-boat and every suitable support in the vicinity held as many as could crowd upon it.

Extremely low water made their capture easy with a dip-net, as they could be followed in a boat and scooped up before finding refuge among the weeds of the deeper water. An early record of a specimen from Sodus Bay may be found in the 25th Report of the State Museum, 1873, p. 17.

This species is also to be found in Irondequoit Bay and a large female taken in November, 1917, is the

model of a fine cast in the exhibit series of the State Museum. Dr. A. H. Wright (*Copeia,* No. 66, p. 7) mentioned a carapace taken June 27, 1914, at Hilton Beach. DeKay (New York Fauna, pt. 3, 1842, p. 19) stated that the species was not uncommon in the streams of Chautauqua and Erie Counties.

The occurrence of the Map Turtle in Lake Champlain was made known in 1842 by Zadock Thompson in his "History of Vermont"; and it may now be definitely recorded from Lake George. On July 20, 1920, a large female was found on Juanita Island and on August 10, 1921, a very large specimen was seen basking on a stranded log at Elizabeth Island. This specimen was captured the following day about five hundred yards away in shallow water and while confined in a box disgorged several large and many small fragments of shells of the fresh-water clam, *Unio complanatus* (Sol), hundreds of individuals of which were living in the lake bottom mud and sand in the vicinity.

It may be conjectured that the eastern extension of the range of the Map Turtle in New York has been by way of the St. Lawrence River and that specimens in Lake Champlain and Lake George came in by way of the Richelieu River rather than by following the Erie and Champlain canals across the state.

SHERMAN C. BISHOP,
New York State Museum.

THE FOOD CAPACITY OF THE TOAD

On the evening of July 19, 1920, a medium sized toad (*Bufo fowleri* Putnam) came to my porch where the common southern May Beetle (*Lachnosterna ephilida* Say) was swarming about the lights. I soon noticed that this toad was devouring all of the May Beetles that he could reach with his tongue and after I had fed him a few it occurred to me that it

might be a good thing to test his capacity for these beetles. The first night this toad ate forty-three beetles in an hour and five minutes. The night of July 20 it ate thirty-four in forty-five minutes. The night of July 21 it ate thirty-seven in an hour. The night of July 22 it ate thirty in an hour and a half. And the night of July 23 it ate twenty-six in two hours. On July 24 the flight of beetles was practically over and only seven beetles came to the light in three hours. Usually the first fifteen to twenty beetles would be eaten with apparently great relish, but after that it required considerable coaxing to get the toad to eat at all, and when the number eaten got to the thirties the toad would take his front feet and literally cram the beetles down his throat at the same time going through a series of contortions which seemed to put that beetle into its proper cranny. These maneuvers were very comical and reminded me of the actions of a small boy at a picnic trying to eat just one more piece of cake. In each case, excepting the night of July 24, when the flight of beetles was practically over, the numbers given represent all that I could get the toad to eat. After it had eaten its fill it might look at a beetle placed before it but usually it turned its back on all such proffers and if the efforts were persisted in the toad hopped away from the porch in disgust.

This represents a total of 177 May Beetles destroyed in five days and if each one of these eighty-eight pairs laid 50 eggs this one toad prevented the development of 4,400 white grubs on my lawn.

It is only fair to state that *Lachnosterna ephilida* is one of the smaller May Beetles. It averages about fifteen millimeters in length and about seven in diameter and weighs, when dry, about 150 milligrams.

Z. P. METCALF,
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THE TYPE LOCALITY OF *CROTALUS WILLARDI* MEEK

Crotalus willardi was described by S. E. Meek (Field Columb. Mus., Zool. Ser., 7, Nov., 1905, p. 18, pl. 3) on the basis of a single specimen stated by him to have come from Tombstone, Arizona. Stejneger and Barbour, in their *Check List of North American Amphibians and Reptiles* (1917, p. 111) again give the type locality of this species as Tombstone, Arizona. The species was named for Mr. Frank C. Willard, who collected the type specimen. Mr. Willard resided at Tombstone at the time, but he made many spring and summer trips to certain of the nearby mountain ranges, and it occurred to me as a likely possibility that this snake was collected on some of those outings.

An appeal to Mr. Willard for information elicited the following reply: "In regard to the rattlesnake which I found, it is my certain knowledge that it was taken in the Huachucas, and my recollection is that it was captured a short distance above Hamburg in the middle branch of Ramsey Canyon." This locality is about thirty miles southeast of Tombstone, not so very far in linear distance, but in a different life zone and amid totally different faunal surroundings. The point indicated is in the Huachuca Mountains in Ramsey Canyon, at about 7000 feet altitude and well up in the Transition Zone. It is a very different region indeed from the stony, *Covillea*-covered, Lower Sonoran mesa upon which Tombstone is situated, and the difference is worth knowing by any student of geographical distribution, in reptiles as well as in any other group of animals.

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AN EASTERN RECORD AND A NOTE ON *CHARINA BOTTAE* (BLAINVILLE)

While driving through Shoshone Canyon, July 11, 1921, a *Charina* was collected four miles west of Cody, Wyoming. As far as I can determine this is the most eastern record for *Charina bottae.*

The snake was found in one of the few small open spaces along the road in the canyon. Because of the relative scarcity of specimens of this species I have given this specimen (now U. of Mich. No. 56253) to the Museum of Zoology, University of Michigan.

The Boa is like the typical *Charina bottae* except that the temporal plate is much reduced.

It is interesting to note that it differs from the specimens which Van Denburgh (Calif. Acad. Sci. Vol. X, No. 3, pp. 31-32, Aug. 6, 1920) described from Utah as *Charina bottae utahensis.* His new subspecies is based upon seven specimens each having 41 scale rows while the *C. bottae* of the more western states have from 43-49 scale rows. My specimen collected about 125 miles east of the more eastern record of *C. b. utahensis* of Van Denburgh has 43 rows. The most eastern record of the U. S. N. M. (No. 60237) from Chico, Montana, has 43 scale rows.

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